

CS249r Final Project Pitches

Please add ~1 slide per team highlighting your project and allowing you to pitch your project proposal to the class to get feedback

Securing ROS

Overview

- Motivation
 - ROS has limited inherent security
 - Want to facilitate safe, remote applications
- Deliverables
 - PoC MiTM ROS attack
 - PoC ROS + TLS defense
 - Simple performance stress test(s)
 - Possible MavBench benchmarking
- Stretch
 - Filter ROS message queues based on thresholding and “distance functions”
 - Protect against malicious/erroneous sensor readings

Specifications

- Technologies: ROS, Python (possibly C++), TCP and TLS
- Team members: Vincent Viego

